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#### Scheme 1

Synthesis of New Crosslinkers

New Crosslinkers (NCL)

#### Figure 2

#### Five New Crosslinkers

New Crosslinkers (NCL)

n=1, N,N'-(Dimethacryloyloxy)malonamide (C3NCL)

n=2, N,N'-(Dimethacryloyloxy)succinamide (C4NCL)

n=3, N,N'-(Dimethacryloyloxy)glutarylamide (C5NCL)

n=4, N,N'-(Dimethacryloyloxy)adipamide (C6NCL)

n=6, N,N'-(Dimethacryloyloxy)suberoylamide (C8NCL)

Figure 3

#### Synthesis of Star-shaped New Crosslinker

#### Figure 4

# EXAMPLES OF POSSIBLE NEW DEGRADABLE CROSSLINKERS

Linear alphatic type:

Linear aromatic type:

H<sub>3</sub>C O O O CH<sub>3</sub>  

$$CH_2=C-C-ONHCCH_2$$
— $CH_2CNHO-C-C=CH_2$ 

Star aromatic type:

Star alphatic type:

Figure 5

#### Synthesis of an Acrylamide Type Crosslinker